Each of the aforementioned U.S. and International patent applications are hereby incorporated by reference in their entireties.

In the Sequence Listing:

Please replace the Sequence Listing as originally filed on February 22, 2001 with the Substitute Sequence Listing filed herewith.

In the Claims

Please add Claims 15-21 as follows:

15. The polynucleotide sequence of claim 1 for use in analyzing a sample for mutation of a polynucleotide sequence encoding a human mismatch repair protein comprising:

a polynucleotide sequence of at least 15 and no more than 30 consecutive bases of the polynucleotide sequence of ATCC Deposit No. 75649.

16. The polynucleotide sequence of claim 1 for use in analyzing a sample for mutation of a polynucleotide sequence encoding a human mismatch repair protein comprising:

a polynucleotide sequence of at least 15 and no more than 30 consecutive bases of the polynucleotide sequence of ATCC Deposit No. 75651.

17. The polynucleotide sequence of claim 1 for use in analyzing a sample for mutation of a polynucleotide sequence encoding a human mismatch repair protein comprising:

a polynucleotide sequence of at least 15 and no more than 30 consecutive bases of the polynucleotide sequence of ATCC Deposit No. 75650.

18. A process for diagnosing a susceptibility to cancer comprising:

determining from a sample derived from a human patient a mutation in a human mismatch repair gene, said human mismatch repair gene comprising the polynucleotide sequence of claim 6.

19. A process for diagnosing a susceptibility to cancer comprising:

determining from a sample derived from a human patient a mutation in a human mismatch repair gene, said human mismatch repair gene comprising the DNA of claim 7.

20. A process for diagnosing a susceptibility to cancer comprising:

determining from a sample derived from a human patient a mutation in a human mismatch repair gene, said human mismatch repair gene comprising the DNA of claim 8.

21. A process for diagnosing a susceptibility to cancer comprising:

determining from a sample derived from a human patient a mutation in the polynucleotide of claim 1.